PAY OR PLAY EMPLOYER MANDATES: EFFECTS ON INSURANCE COVERAGE AND COSTS

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Summary

Skyrocketing health care costs and the existence of increasing numbers of uninsured Americans have compelled this country to focus considerable attention on health system reform. Numerous Congressional leaders, associations, academics, and health policy analysts have suggested ways to reform the current system to provide access to health care for all Americans. Many of the prominent proposals attempt to build on our current employment-based health insurance system. These proposals call for "play or pay" employer mandates to broaden coverage to all workers and their dependents. These mandates would require employers to either provide health insurance directly ("play") or pay a payroll tax to enroll their workers into a public health insurance plan ("pay").

Most "play or pay" proposals would also provide access to a public health plan for persons who are not working. Subsidies would be provided to cover the premiums and cost sharing requirements for low-income persons. Costs for persons with incomes below poverty would be fully subsidized, and costs for persons with incomes up to 200 percent of poverty would be subsidized on a sliding scale. Thus, the play or pay proposals would ensure all Americans regular access to health care.

Despite the prominence of these proposals, we know little about their full effects. This paper presents an analysis of the direct effects of play or pay employer mandates. The Pension Welfare and Benefits Administration at the Department of Labor provided funding to develop an economic model that could evaluate these proposals. The model builds upon a microsimulation system (called TRIM2) that has been used by government agencies and private organizations to evaluate various public policies over the last 20 years. The enhanced model integrates data describing employment-based health plans and employers' average payrolls with a representative sample of nonelderly Americans from the March 1990 Current Population Survey. By comparing workers' health insurance costs to optional payroll tax payments, the model simulates employers' decisions either to provide insurance or to pay a payroll tax.

Assumptions of the Analysis

Throughout this analysis we assume that all employers would choose the less expensive insurance option. We show results for two different payroll tax rates -- 7 percent and 9 percent -- and model the requirements of the leading comprehensive play or pay proposals. These assumptions would require employers to pay 80 percent of the cost to insure persons working 18 hours a week or more (and their dependents) or pay a flat tax on their workers' wages. Employers would pay a tax on the wages of employees working less than 18 hours a week to enroll them in the public plan.

We assume that all employers could purchase a uniform benefit package with a 20 percent coinsurance requirement at the average price available to employers with similar characteristics.

Further, we assume that all workers must be insured through their own employer, and nonworking dependents are insured through the family's primary earner.

Who Would Be Covered

The most striking finding of this analysis is the large number of persons who would potentially be enrolled in the public plan. Under the 9 percent payroll tax rate nearly 40 percent of nonelderly Americans would be enrolled in the public plan (including workers, dependents of workers, and nonworkers). Under a 7 percent payroll tax rate assumption, the percentage of nonelderly Americans enrolled in the public insurance plan would increase to 52 percent.

The total number of persons insured through private, employment-based plans is likely to decline under both payroll tax options. Currently, 142.2 million Americans are insured through employment-based plans. Under a 7 percent play or pay mandate, we predict that the number would shrink to 104.7 million persons, and under the 9 percent mandate, the number would decline to 131.8 million persons. Under the 7 percent mandate, as many as 99 million Americans would switch health insurance plans, 84 million would remain in their current plans, and 33 million uninsured persons would gain health insurance. About 67 million persons would switch insurance plans under a 9 percent plan.

Some workers currently insured through employment-based plans would shift to the public plan. For example, 35.3 percent of workers currently insured through their own employer would shift into the public health plan under the 7 percent payroll tax rate. Under the 9 percent payroll tax rate, 20.8 percent of workers currently in employment-based plans would switch to the public insurance plan. In contrast, a large share of workers currently without employment-based insurance would be enrolled in the public insurance plan under a play or pay mandate. Under the 7 percent payroll tax rate assumption, 69 percent of workers currently without employment-based insurance would be enrolled in the public plan, compared to 54 percent under the 9 percent plan.

These results are not surprising given that persons without employment-based insurance typically work for very small employers and many work part time. The play or pay proposals are designed to limit costs for businesses with high health insurance costs relative to payroll compared to a straight mandate that would require all businesses to purchase insurance privately. The cost of insuring workers is high for many small employers -- they face higher insurance costs and pay lower wages than larger firms. Small employers would be much more likely to choose the payroll tax option than other employers. For example, we expect that 63.8 percent of workers in firms with fewer than 25 employees would be enrolled in the public plan under a 9 percent play or pay plan, compared to the average public plan enrollment rate of 41.5 percent.

Who Would Pay

Despite the shifts toward public plan coverage, employers would continue to finance most of the cost of insuring nonelderly Americans under play or pay mandates. Employers' insurance costs (in 1989 dollars) would increase to $158.6 billion under the 7 percent payroll tax option and

to $173.2 billion under the 9 percent payroll tax option, compared to current insurance costs of $128.9 billion. The increase in costs -- $29.7 billion (23 percent) in the 7 percent plan and $44.3 billion (34 percent) in the 9 percent plan -- would fall most heavily on small employers. For example, insurance costs for firms with fewer than 25 workers would increase by 71 percent ($11 billion compared to $15.5 in the current system) under a 7 percent play or pay mandate, and would double (a $16 billion increase) under a 9 percent play or pay plan. Under a fully phased-in play or pay system, all workers and their dependents would be enrolled in a health insurance plan by their employers -- some in a private plan and others in a public plan.

Government's costs would also increase to broaden insurance coverage for nonworking persons and to subsidize out-of-pocket costs for the working poor. The government would also subsidize some employers who enroll their workers in the public plan when their payroll taxes do not pay for the full cost of their workers' health insurance. We predict that the government's share of the costs in a 7 percent play or pay mandate would be $64.4 billion. This represents an increase of $36.4 billion over the 1989 Medicaid costs for the nonelderly, noninstitutionalized population. Under the 9 percent plan, government's share of the total costs would be somewhat smaller. We predict that government expenditures would be $52.8 billion with a 9 percent play or pay employer mandate, an increase of $25.2 billion relative to current costs. These costs represent a 17 percent increase in government spending for personal health care under a 7 percent plan and a 12 percent increase under a 9 percent plan, compared to 1989 government (federal and state and local) spending of $215.4 billion.

We caution that these are simple estimates of government's costs under a play or pay system. If government succeeded in negotiating lower premiums because of the large size of the public plan, their costs would be lower. Uncompensated care would be eliminated, and the government and employers would realize savings as providers no longer need to shift these costs to payers. If insurance reform succeeds in reducing small employers' premiums significantly, small employers' cost increases would be less than those shown here. On the other hand, the relatively large size of the public plan and the number of low-income Americans eligible for premium and cost-sharing subsidies would result in a large administrative burden for government.

In sum, play or pay employer mandates have gained momentum as the leading health care reform proposals. They would lead to a hybrid system in which many Americans would retain private, employment-based coverage, but a large share would be covered under a public health insurance plan. Play or pay mandates would represent an expanded financial role for many employers, even though the number of persons enrolled in private, employment-based health insurance plans would diminish. However, insurance costs increases under the play or pay systems would ensure that all Americans would have access to health care on a more equal basis, and they would reduce the current burden of out-of-pocket health care spending for many families.

TABLE OF CONTENTS

Page

I. INTRODUCTION 1

II. METHODS 3

III. RESULTS 10

Effects of Play or Pay Mandates on Insurance Coverage 10
  Private-Sector Workers 15

Effects of Play or Pay Proposals on Costs by Sector 20
  Costs by Employer Size 28

IV. SUMMARY 28

NOTES 32

REFERENCES 34

LIST OF TABLES AND FIGURES

Table No.	Title	Page
1	Play or Pay Employer Mandates: Simulation Assumptions	6
2	Shifts in Insurance Coverage: Current System Compared to Play or Pay	13
3	Shifts in Insurance Coverage: Current System Compared to Play or Pay	14
4	Effects of Play or Pay Mandate: Private Sector Workers' Health Insurance Status: 9% Employer-Paid Payroll Tax	21
5	Effects of a Play or Pay Mandate: Private Sector Workers' Health Insurance Status: 7% Employer-Paid Payroll Tax	22
6	Effects of Play or Pay Employer Mandates on Direct Spending by Payor	25
7	Insurance Costs by Payor: Current System Compared to Play or Pay	27
8	Effects of Play or Pay Mandates on Employers Costs	29

Figure No.	Title	Page
1	Predicted Annual Premium for Single Policies: Uniform Benefit Package	8
2	Annual Premiums for Single Coverage	9
3	Health Insurance Coverage of the Nonelderly: Play or Pay Employer Mandate	11
4	Percent of Private Sector Workers Enrolled in Public Plan: Play or Pay Employer Mandate	16
5	Average Payroll of Full-Time Workers	18
6	Differences in Payroll and Premiums by Employer Size: Difference Between Largest Employers and Smaller Employers as a Percent of Payroll and Premiums of Largest Employer	19
7	Insurance Costs by Major Payors	24

I. Introduction

The issue of health care reform has received considerable attention in the United States. Health care spending continues to absorb ever larger shares of our resources each year, yet, at any given time, about 33 million Americans do not have access to regular health care because they are uninsured. These dual problems of skyrocketing costs and lack of access have generated a number of proposals to reform the health care system.

Many of these reform proposals focus on a particular type of employer mandate, a "play or pay" system, to broaden access to care. Under these proposals employers would be required to either provide a health care plan meeting specified standards or pay a payroll tax to cover workers under a public health insurance plan. The play or pay employer mandates, thus, would cap employers' costs at some pre-specified payroll tax rate. Businesses employing large numbers of part-time or low-wage workers would be treated more favorably under these proposals compared to a straight mandate requiring them to provide health insurance because these firms face high insurance costs relative to their worker's wages. By offering an alternative to employer purchase of insurance on the private market, play or pay proposals would solve access problems and limit costs for employers who find it difficult to obtain insurance for workers with high risk jobs or unfavorable insurance ratings.

Comprehensive play or pay proposals also extend coverage under the public plan to nonworking persons, and those who can afford it would be required to pay a premium to cover the cost of the plan. Finally, these plans require new revenues to fund a variety of direct and indirect subsidies required to make the system viable. General revenues would be required to cover some

of the health costs of employers who buy into the public plan at below-market insurance rates. Direct subsidies to low-income, nonworking persons who cannot pay for the cost of the plan and low-income workers who cannot pay their premium shares and coinsurance requirements will be necessary to ensure full access to care. Of course, the elimination of acute care spending under Medicaid to some extent would offset these subsidies for government.

Despite the considerable attention focused on play or pay employer mandates, we know little about how employers would respond to this policy. The distributional consequences of such proposals are of particular interest. What types of employers would continue to provide health insurance? Will decisions differ across firm size, industry, or location? How will the subsidies work? What are the characteristics of Americans who would be enrolled in the public-sponsored plans compared to private-sponsored insurance plans?

Analysis of these proposals requires consideration of employers' insurance costs and their payroll characteristics, as well as the characteristics of workers in their employ. It also requires information about the nonworking population to fully assess the consequences of the comprehensive play or play health care reform proposals.

This paper presents new estimates of the effects of play or pay employer mandates. Under funding from the Department of Labor's Pension Welfare and Benefit Administration, we have developed a microsimulation model of the current employment-based health insurance system. This model combines employment-based data on health plans and payrolls with data describing the characteristics of the US population. The model allows us to examine the current system and to simulate alternative employment-based systems.

We present an analysis of a play or pay employer health insurance mandate modeled after several of the comprehensive health care reform proposals introduced in the 102nd Congress. We simulate the effects of a play or pay proposal under two assumptions about employers' payroll tax rates to provide a range of estimates. This brief paper presents several basic results: the number of workers likely to be enrolled in the public plan, shifts in insurance status from the current system, employers' decisions by firm size, and the costs to the government and private sectors. A more complete and detailed analysis that examines the effects of play or pay proposals under various design assumptions is also underway and will be available in February. The discussion below briefly outlines the methods used in this analysis, the assumptions used in simulating the employer mandate, and the results.

II. Methods

We use The Urban Institute's microsimulation model, called the Transfer Income Model (TRIM2), to examine the effects of expanding the employment-based health insurance system. The model represents an enhanced version of TRIM2 used in an earlier examination of employer mandates (Zedlewski, 1991). In this analysis we integrate data from the March 1990 Current Population Survey (CPS) with data representing employment-based health insurance plans, and data describing employers' payroll characteristics. The two employment-based data sources are used to add key information about workers that is not available on the CPS. We add employment-based health insurance premiums and the average payroll for each worker's firm. Thus, we can evaluate employers' decisions to provide health insurance or to pay the tax, and we can examine

how these decisions affect workers. Insurance payments by individuals, employers, and government can be calculated and aggregated across different population characteristics.

We match insurance premiums from the 1989 Health Insurance Association of America (HIAA) and the 1989 Foster-Higgins Surveys to workers reporting health insurance coverage on the CPS using statistical matching procedures. The matching procedure uses variables common to the employer insurance plans and workers on the CPS to "match" individuals on the CPS to health plans. These variables include industry, location, firm size, and whether the worker has to pay part of the insurance premiums. For workers without health insurance we predict an insurance premium for a uniform benefit package, based on their employers' characteristics.

Similarly, we match employer payroll data from the County Business Patterns (CBP, 1988) data set to workers on the CPS. The CBP data set is a universe sample collected from payroll tax forms filed by all establishments in the US. We match these data to workers on the CPS using detailed information on their state of residence, 3-digit industry code, and establishment size.[1]

The enhanced CPS, thus, provides a full socioeconomic profile of the US population, along with additional information about their employers. The enhanced file includes the employer's insurance premium and the shares paid by the worker and the employer for workers with employment-based health insurance from the health insurance plan data base. It includes the average payroll at the establishment employing each worker on the CPS from the CBP file. Using these data sources we can simulate the decisions of workers' employers to provide health insurance or pay the payroll tax by comparing their health insurance costs to the cost of paying a tax on payroll costs for workers included in the mandate.

Statistical matching techniques provide a useful vehicle through which we can explore policies that require information from multiple data sets. Obviously, we would prefer using a representative data base with information about workers and their employers obtained from direct sources, but this type of data base does not exist. However, the richness of the two employment-based donor files -- about 4,000 health plans and data summarizing the payroll characteristics of more than 160,000 establishments in the US -- ensures that reasonable imputations can be made, given the diversity of workers represented on the CPS. In addition, we have completed preliminary analyses of the employment-based data to explore their statistical properties and to guide the statistical matching procedures. Our early analysis of play or pay employer mandates using the payroll and health insurance price data alone are also very consistent with those shown here (Acs, et al., forthcoming 1992).

The assumptions used to simulate the play or pay proposals are obviously of critical importance. Table 1 outlines these assumptions. Throughout this analysis we assume that private-sector employers choose the lower-cost option between either providing health insurance or paying the optional payroll tax.[2] We do not assume that the government sector makes "play or pay" decisions. Instead, we assume that they provide at least a minimum health benefit package to their workers.

Employers can purchase a uniform benefit package of the type shown in table 1 at the average price currently available to employers with the same size, industry, and location characteristics. Thus, while we do not assume that insurance costs will be considerably lower than current prices, the assumption that all employers (irrespective of the experience rating of their group) can purchase insurance at current rates incorporates insurance reform provisions that

Table 1
Play or Pay Employer Mandates: Simulation Assumptions

Employer Requirements	Must either pay 80 % of the cost of a uniform benefit package for workers and their dependents or pay a payroll tax.
Benefit Package	1) All employers can purchase insurance at average rates currently-available for firms in their region in the same size/industry group. 2) The uniform benefit package includes deductibles of $200 for singles and $500 for families; a 20% coinsurance requirement; covers well care; preadmission certification required.
Coverage Requirements	1) Hours of work: persons working 18 hours a week or more included in play or pay mandate; employers pay a payroll tax on the wages of persons working less than 18 hours; 2) Primary payer: workers accept coverage through own employer; dependents covered through primary worker's plan; coordination of benefits for persons with dual coverage.
Workers' Premiums	Pay 20% of the cost of the employer's premium or the cost of the public plan if full time, less subsidies for low-income persons.
Public Plan	1) Government pays premiums equal to those currently available to large (1000+) firms (see Figure 2). 2) Persons not covered through employer enroll in public plan. 3) Families pay full public plan premium when not enrolled by employer, subject to premium subsidies.
Government Subsidies	1) Premiums for persons in private and public plan: reduced by 2 percentage points for each 10% that income is below 200% of poverty. 2) Premiums for families enrolled in public plan with incomes between 200-400% of poverty not to exceed 3.5%, 4%, and 5% for those with income less than 250%, 325%, and 400% of poverty, respectively. 3) Government pays cost-sharing for persons with incomes below poverty; and shares costs for persons with incomes between 100-200 percent of poverty.

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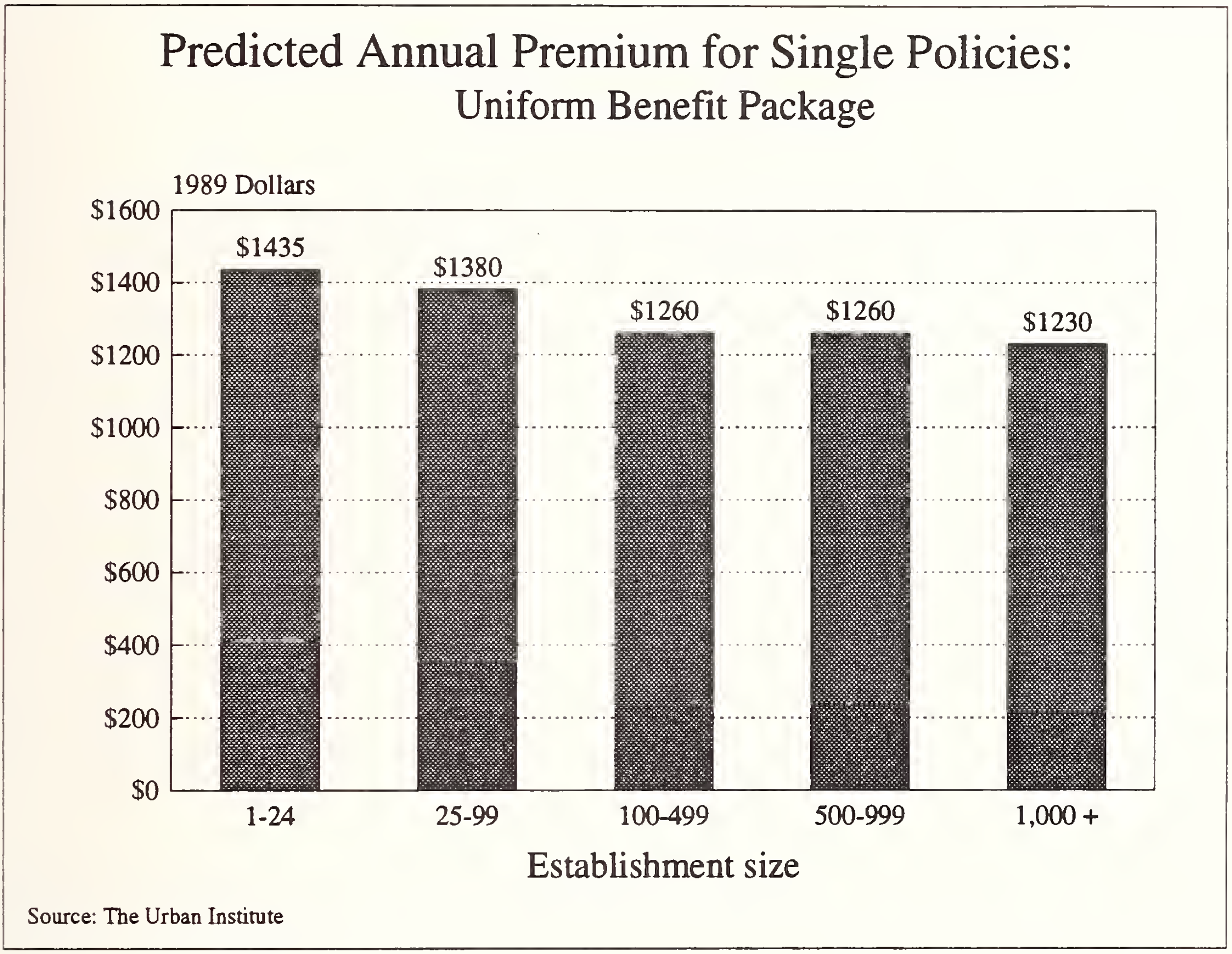
[1] Cost-sharing estimated as average out-of-pocket spending for doctors care, drugs, and hospital care for insured families (Consumer Expenditures Survey: $225, $215, $570, and $665 for singles, adult and child, families, and two adults, respectively).

guarantee reasonable rates to all employers. Under these assumptions, however, small employers pay more than large employers for the same benefit package.[3] Figure 1 shows the average premium variations by establishment size.[4] If an employer chooses to "play" and already provides health insurance, we assume that the employer retains the current insurance package, provided that it meets the minimum standard required by the mandate.

As shown in the table outlining the simulation assumptions, employers choosing to "play" must pay 80 percent of the premium and their workers pay 20 percent. Employers must pay these costs for full-time workers (defined as 18 hours a week or more). Part-time workers can be enrolled in the public plan even when the full-time workers are insured privately, and employers pay a payroll tax based on the wages of the part-time workers.

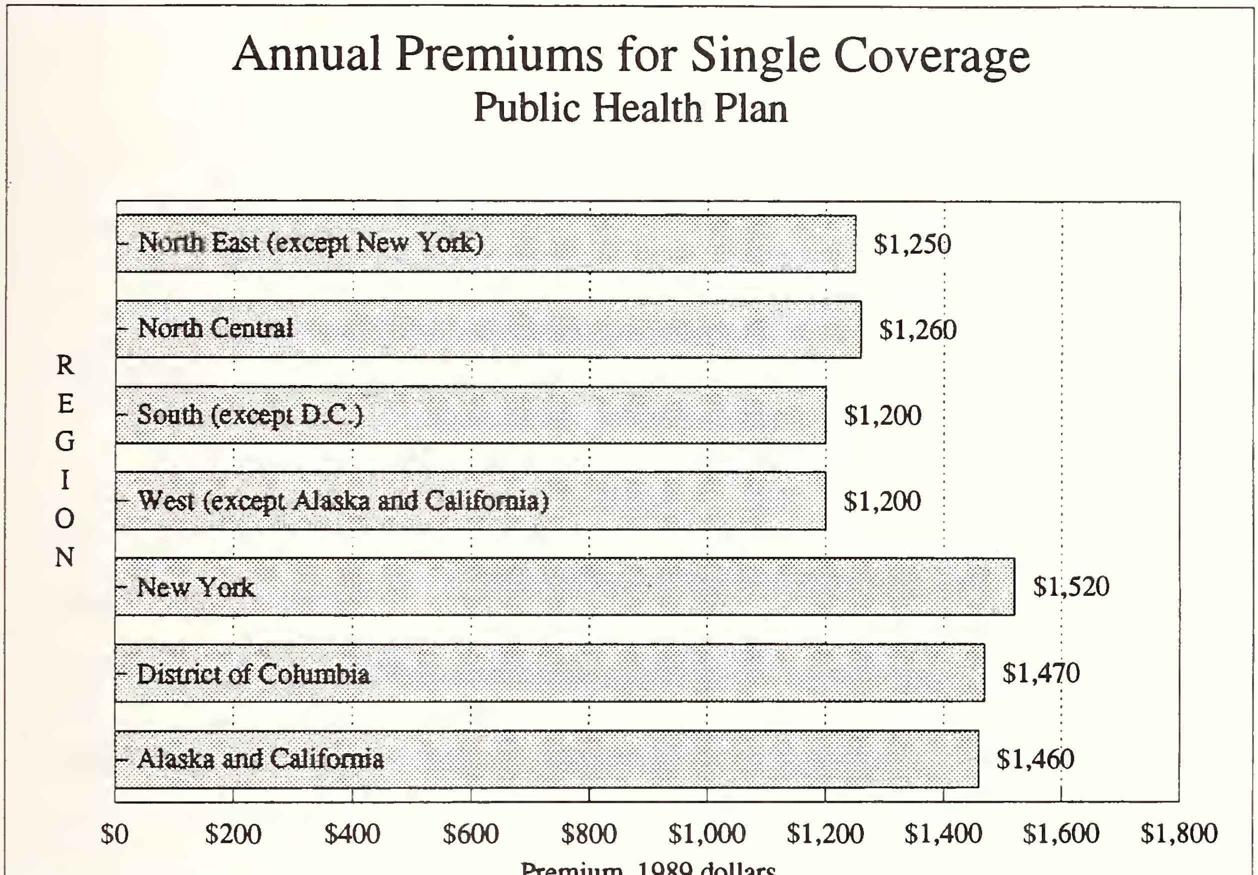
Table 1 also outlines requirements for the public plan. We assume that the government purchases the equivalent uniform benefit package for persons enrolled in the public plan at rates currently-available to large firms. These premiums vary by location. Figure 2 shows the premium assumption for single coverage. We make a simplifying assumption that dual coverage (an adult and child) costs 1.8 times the single premium, and family coverage costs 2.5 times the single premium. These are average ratios reflected in employer and private health insurance plan data for 1989. The government covers the costs of the public plan less the taxes paid by employers, and public plan premiums paid by persons enrolled in the public plan. Workers enrolled by their employers pay 20 percent of the public plan premiums and nonworkers pay full cost, less subsidies available to low-income persons. These subsidies cover the full premium share for persons with incomes below poverty whether enrolled in the public plan or a private employer plan. This subsidy phases out for persons with incomes between 100 and 200 percent of poverty.

Figure 1



Source: The Urban Institute

Figure 2



Source: The Urban Institute

Note: Premiums reflect uniform benefit package with $200 deductible, 20 percent copayment rate (see text).

The government also subsidizes cost sharing requirements under the insurance plans such that persons with incomes below poverty receive full subsidies for these costs and persons with incomes between 100 and 200 percent of poverty are subsidized on a sliding scale. Finally, public plan premiums are capped for families with incomes between 200 and 400 percent of poverty at a percentage of their family income.

III. Results

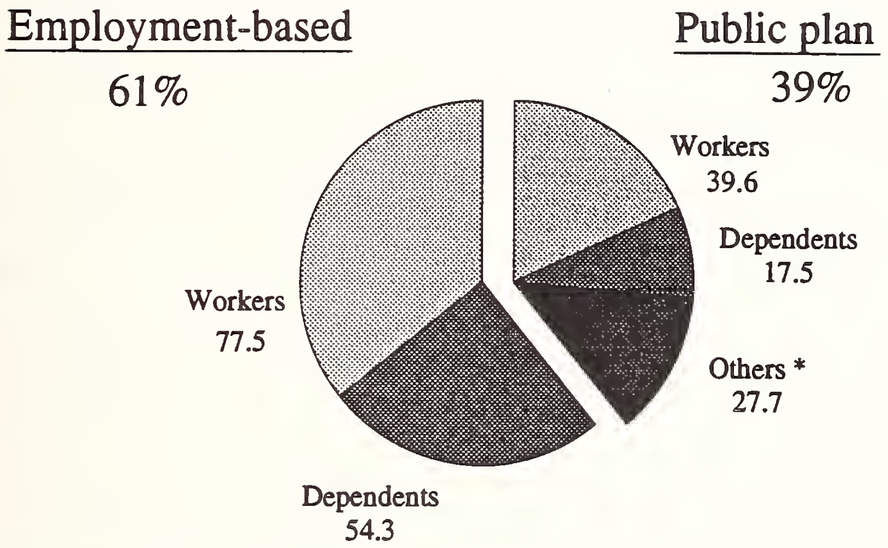
The full distributional results of play or pay employer mandates will be complex depending on the long-run cost shifts across employers, workers, and government. The results presented below focus on the simple, first-round effects of comprehensive play or pay proposals. The results represent a fully phased-in play or pay proposal affecting all employers.[5] We show predicted changes in insurance coverage for the entire population. Then we focus on results for private-sector workers. Finally, we show basic cost effects by sector, and we provide more detail on the cost implications for employers. On the other hand, we are not able to show how employers would shift costs back to labor or consumers, nor do we show how the elimination of uncompensated care would affect payors under a play or pay employer mandate.

Effects of Play or Pay Mandates on Insurance Coverage

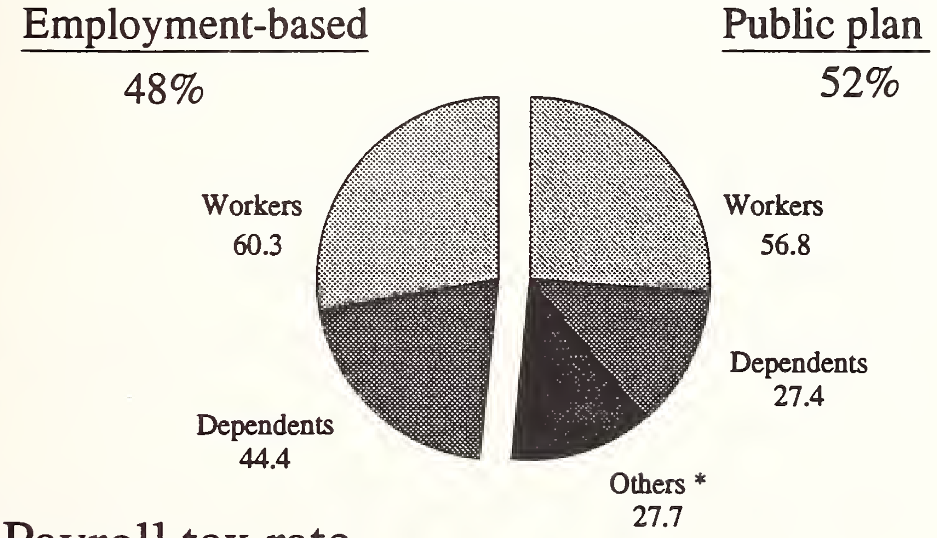
Figure 3 displays the predicted health insurance coverage of the nonelderly population under play or pay employer mandates. Under the 9 percent payroll tax rate assumption, 61 percent of the nonelderly would be enrolled in an employment-based plan, and 39 percent in the public plan. The public plan would include 39.6 million workers, 17.5 million dependents of workers, and 27.7 million nonworkers (including early retirees). Under the 7 percent tax rate assumption

Figure 3

Health Insurance Coverage of the Nonelderly:
Play or Pay Employer Mandate
(Millions of persons)



9% Payroll tax rate



7% Payroll tax rate

Source: TRIM2, based on the March 1990 CPS.
* Other persons include persons without an employed household member.

many more employers would enroll their workers in the public plan. As shown, more than half of the nonelderly population would be enrolled, including 56.8 million workers, 27.4 million dependents of workers, and, again, 27.7 million nonworkers.

The data in table 2 compare insurance coverage under a 9 percent play or pay proposal to prior insurance coverage, and those in table 3 show the results for the 7 percent payroll tax assumption. Some workers and dependents currently enrolled in employment-based plans would shift to coverage under the public plan. Among the 71.3 million workers who currently have employment-based coverage through their own employer, 14.9 million would shift into the public plan (20.9 percent). Among dependents currently insured through employment-based plans, employed adults would shift to coverage through their own employer -- 8.8 million in a private plan and 8.2 million in the public plan -- and the remaining 52.9 million would remain insured as dependents -- 44.7 in private plans and 8.2 million in the public plan. Thus, the majority (63 percent) of dependents would remain in their current employment-based plan under a 9 percent payroll tax assumption.

Of the 18.2 million persons currently insured through private, individual insurance policies, two-thirds would gain coverage through an employer either as a worker or as a dependent. For example, 31.3 percent would become insured through private, employment-based plans (20.3 percent as workers, and 11.0 as dependents), and 34.6 percent would be enrolled in the public plan under employer sponsorship (24.7 percent as workers and 9.9 percent as dependents of workers). The remaining group who currently purchases private, nongroup insurance policies would be enrolled in the public plan. About 6.2 million persons who currently purchase individual insurance would enroll in the public plan.

Table 2

Shifts in Insurance Coverage: Current System Compared to Play or Pay

9% Employer-Paid Payroll Tax

	Total	Employment-Based		Public Plan		
	(000)	Workers	Dependents	Workers	Dependents	Others
			Numbers in Millions			
Current System:						
Employment-Based Plan						
Own Employer	71.3	56.5	--	14.9	--	--
Other Employer	70.9	8.8	44.7	9.2	8.2	--
Private, Nongroup	18.2	3.7	2.0	4.5	1.8	6.2
Government[1]	22.9	1.4	2.8	1.9	3.3	13.3
Uninsured	33.4	7.1	4.8	9.1	4.2	8.2
Total	**216.6**	**77.5**	**54.3**	**39.6**	**17.5**	**27.7**
			Percent by Coverage Status			
Employment-Based Plan						
Own Employer	100.0%	79.2%	----	20.8%	---	---
Other Employer	100.0	12.4	63.0%	13.0	11.6%	---
Private, Nongroup	100.0	20.3	11.0	24.7	9.9	34.0%
Government[1]	100.0	6.1	12.2	8.3	14.4	58.0
Uninsured	100.0	21.3	14.4	27.2	12.6	24.6
Total	**100.0%**	**35.8%**	**25.0%**	**18.3%**	**8.1%**	**12.8%**

SOURCE: The Urban Institute's Transfer Income Model (TRIM2) based on the March 1990 Current Population Survey.

Note: 1. Includes Medicaid, CHAMPUS, and Medicare.

Table 3

Shifts in Insurance Coverage: Current System Compared to Play or Pay

7% Employer-Paid Payroll Tax

	Total	Employment-Based		Public Plan		
	(000)	Workers	Dependents	Workers	Dependents	Others
			Numbers in Millions			
Current System:						
Employment-Based Plan						
Own Employer	71.3	46.1	--	25.2	--	--
Other Employer	70.9	6.3	38.1	11.7	14.8	--
Private, Nongroup	18.2	2.6	1.4	5.6	2.4	6.2
Government[1]	22.9	1.0	1.9	2.3	4.2	13.4
Uninsured	33.4	4.3	3.0	11.9	6.0	8.2
Total	**216.6**	**60.3**	**44.4**	**56.8**	**27.4**	**27.7**
			Percent by Coverage Status			
Employment-Based Plan						
Own Employer	100.0%	64.7%	--	35.3%	--	--
Other Employer	100.0	8.9	53.7%	16.5	20.9%	--
Private, Nongroup	100.0	14.3	7.7	30.8	13.2	34.1%
Government[1]	100.0	4.4	8.3	10.0	18.3	58.5
Uninsured	100.0	12.9	9.0	35.6	18.0	24.6
Total	**100.0%**	**27.8%**	**20.5%**	**26.2%**	**12.7%**	**12.8%**

SOURCE: The Urban Institute's Transfer Income Model (TRIM2) based on the March 1990 Current Population Survey.

Note: 1. Includes Medicaid, CHAMPUS, and Medicare.

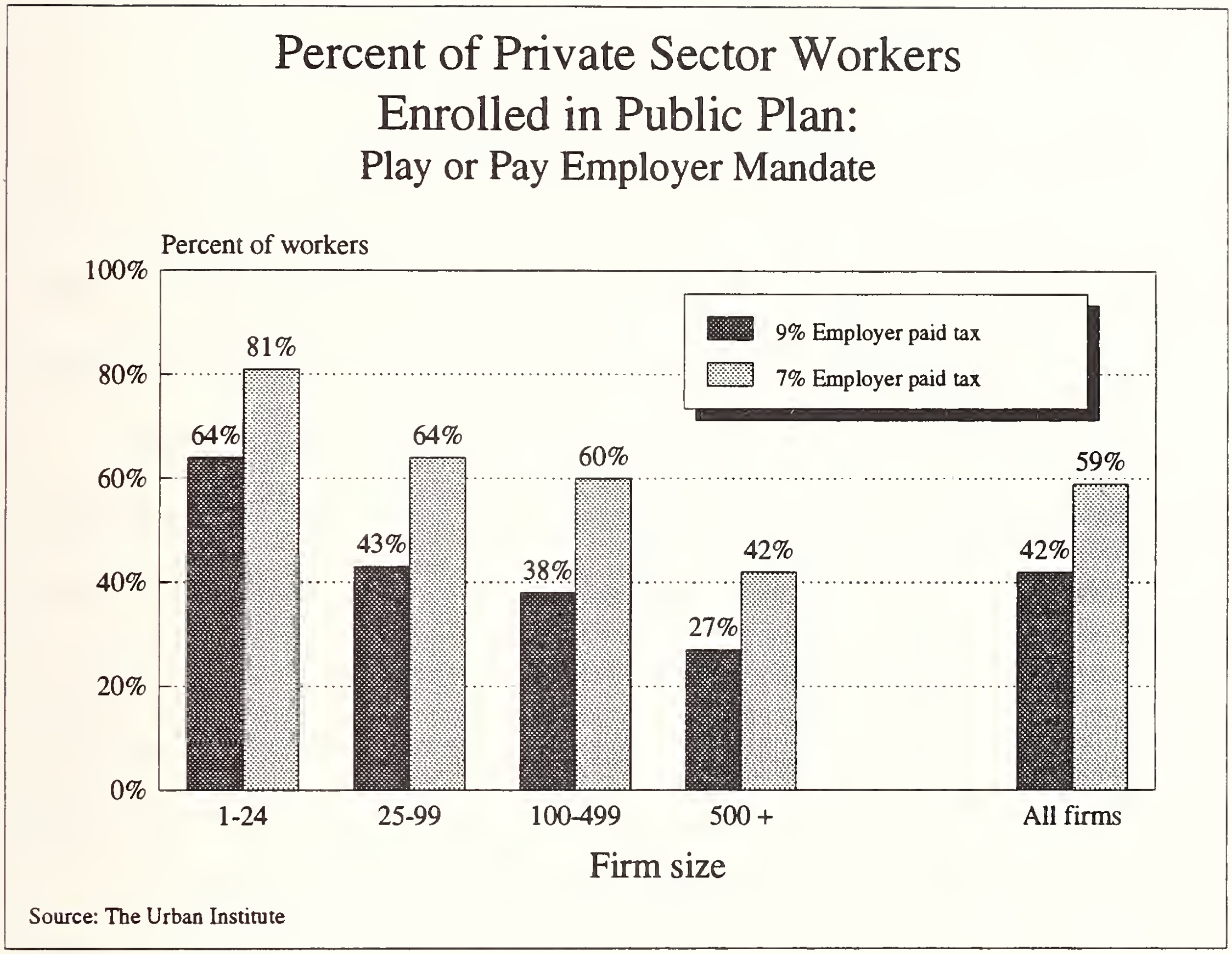
Results in table 3 show more dramatic shifts of workers into the public plan under a 7 percent employer payroll tax requirement. For example, 35.3 percent of workers who currently have employment-based health insurance would shift into the public plan. In fact, far fewer persons would be insured through private, employment-based plans in this scenario than under the current system. Currently 142.2 million Americans are in employment-based plans (71.3 million workers and 70.9 million dependents of workers). Under a 7 percent play or pay proposal, the number would shrink to 104.7 million (60.3 million workers and 44.4 million dependents of workers).

In sum, a large number of persons would change their health insurance coverage under a play or pay employer mandate. Under the 9 percent plan, 67.2 million persons would shift from their current health insurance plan to another plan (either private or public). Under the 7 percent plan, nearly 100 million persons would shift health insurance plans. Under both plans 33 million uninsured persons would gain health insurance.

Private-Sector Workers. A large share of private-sector workers employed in small firms (fewer than 25 workers) will be enrolled in the public plan. This result holds under both the 9 and 7 percent payroll tax rate assumptions. Figure 4 shows that 64 percent of workers in small firms would be enrolled in the public plan under a 9 percent play or pay plan. The proportion increases to 81 percent under the 7 percent plan. In large firms, those with more than 500 employees, 27 and 42 percent of workers would be in the public plan under the 9 and 7 percent payroll tax rate assumptions, respectively.

These differences in public plan enrollment rates are not surprising given differences in costs and average payrolls by firm size. As shown earlier, small firms would pay more than large

Figure 4



Percent of Private Sector Workers Enrolled in Public Plan: Play or Pay Employer Mandate

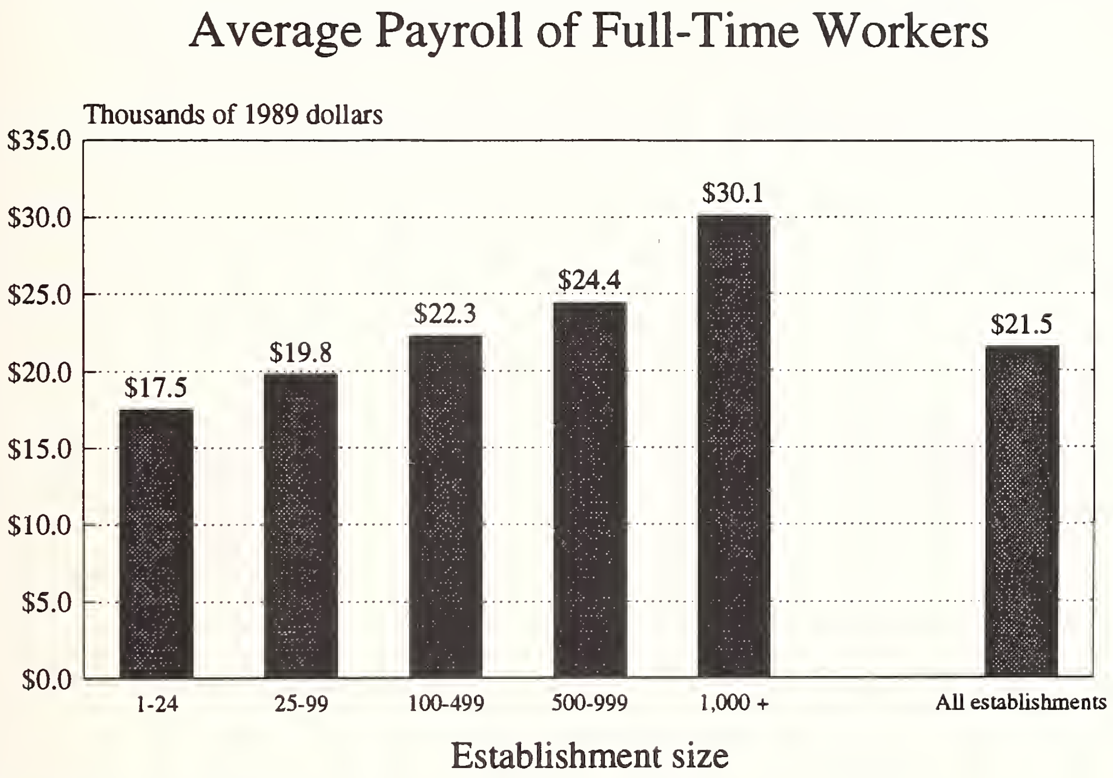
Source: The Urban Institute

firms for the same insurance, because insurers' marketing costs are higher and insurers do not realize the same economies of scale for small firms as they do for large firms. In addition, small employers have lower than average wages (Mellow, 1982 and Acs, et al. forthcoming 1992). Figure 5 highlights average pay differences for full time workers (18 hours or more) across firm size. Full-time workers in small firms earn $17,500 a year on average, compared to $30,080 for workers in large firms, a difference of $12,580 a year.[6] Thus, workers in the smallest firms are paid about 42 percent percent less, on average, than workers in the largest firms.

Figure 6 further highlights that differences between payrolls are much larger than differences in predicted health insurance costs across firm sizes. For example, firms with fewer than 25 workers pay 41.8 percent less than firms with 1,000 workers or more, and they have to pay 16.7 percent more to purchase the same benefit package. The average predicted price for the mandated benefit package for medium size firms (100-499) is very close to the price offered large firms (a difference of only 2.4 percent), but they pay 26 percent less than large firms on average.

Of course, there is considerable variation in pay within these size categories. Nevertheless, the high cost of insurance relative to payroll prevents many small employers from offering insurance under the current system (Marquis and Long, 1991). Most small employers would require insurance prices significantly below those faced by large employers in order to equalize costs of providing health insurance relative to payroll. Capping the relative costs of health benefits would be a significant result of the play or pay employer mandates. Most small employers would choose the payroll tax over providing insurance directly, if they were required to provide this employee benefit.

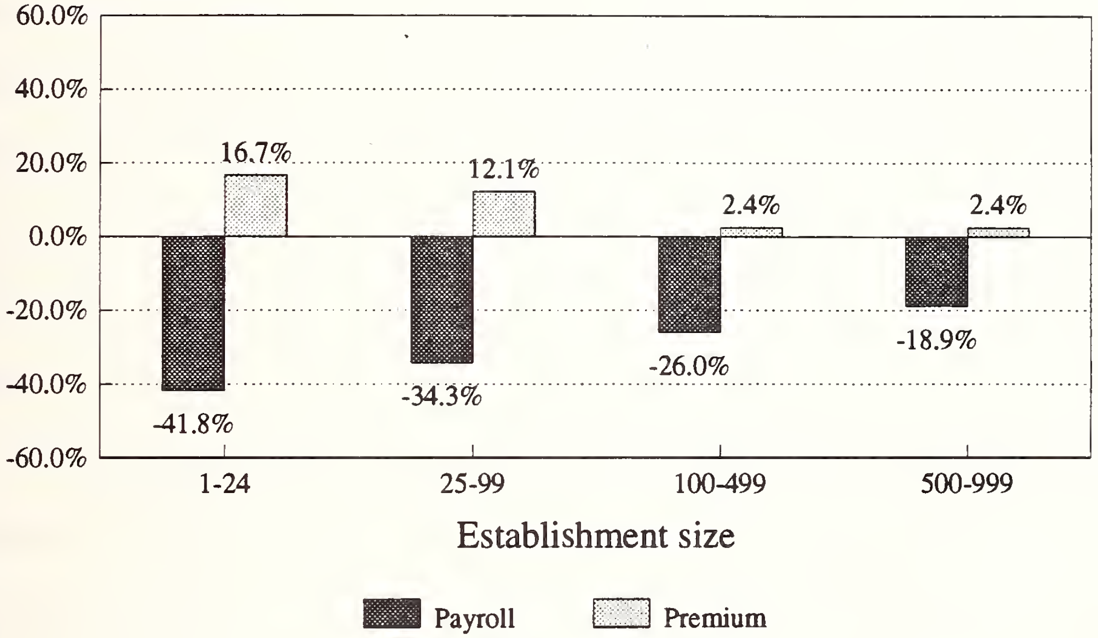
Figure 5



Average Payroll of Full-Time Workers

Source: TRIM2, based on the March 1990 CPS.
Notes: 1. Payroll data from County Business Patterns (CBP) matched to workers Current Population Survey.
2. Average pay reported in the CBP was adjusted to eliminate average effects of pay for persons working less than 18 hours a week.

Figure 6



Differences in Payroll and Premiums by Employer Size:
Difference Between Largest Employers and Smaller Employers
as a Percent of Payroll and Premiums of Largest Employer

Source: The Urban Institute

This effect is further highlighted in table 4 where we show results by firm size and current insurance coverage. Currently, only 8.5 million out of 26.5 million workers employed in small firms are covered under their own employers' plans. We predict that employers would shift almost half (48.2 percent) of these workers to the public plan, given the 9 percent payroll tax choice. Among workers in small firms currently insured through a family member's plan, only 2.0 million would be enrolled in a private, employment based plan under the 9 percent play or pay mandate, and 4.3 million (68.3 percent) would be enrolled in the public plan. Similarly, among workers in small firms without health insurance, 71.8 percent would be enrolled in the public plan. Most small employers who do not offer health insurance would find the 9 percent payroll tax option less expensive than purchasing health insurance privately.

Table 5 shows that 81.5 percent of workers in small firms would be enrolled in the public plan under the 7 percent payroll tax rate assumption. In addition, larger proportions of employers in larger size categories would opt for the public plan coverage. In fact, only large firms (more than 500 workers) would retain the majority of their workers in a private plan under this assumption.

Effects of Play or Pay Proposals on Costs by Sector

The proportion of the nonelderly population enrolled in the public plan will have important implications for the costs to employers, the government, and individuals. In general, the lower the tax rate (and the more persons enrolled in the public plan), the higher the cost to the government. Employers would pay less relative to the actuarial cost of insuring their workers under lower tax rates. But governments' costs would not increase linearly with the proportion of workers enrolled in the public plan. The government would pay a fixed cost for insuring the nonworking

Table 4

Effects of a Play or Pay Mandate:
Private Sector Workers' Health Insurance Status:
9% Employer-Paid Payroll Tax

Firm Size	Current System: Employment-Based Insurance	Total	Number of Workers (millions)		Percent:	
			Employer	Public	Employer	Public
Less than 25	Own Employer Plan	8.5	4.4	4.1	51.8%	48.2%
	Other Employer Plan	6.3	2.0	4.3	31.7	68.3
	None	11.7	3.3	8.4	28.2	71.8
	Total	**26.5**	**9.6**	**16.9**	**36.2**	**63.8**
25-100	Own Employer Plan	8.3	5.8	2.5	69.9%	30.1%
	Other Employer Plan	2.6	1.1	1.4	42.3	53.8
	None	4.3	1.8	2.5	41.9	58.1
	Total	**15.2**	**8.7**	**6.5**	**57.2**	**42.8**
100-499	Own Employer Plan	9.5	6.7	2.8	70.5%	29.5%
	Other Employer Plan	2.1	1.0	1.1	47.6	52.4
	None	3.3	1.5	1.8	45.5	54.5
	Total	**14.9**	**9.3**	**5.6**	**62.4**	**37.6**
500+	Own Employer Plan	27.6	22.2	5.4	80.4%	19.6%
	Other Employer Plan	5.1	2.7	2.4	52.9	47.1
	None	6.2	3.4	2.8	54.8	45.2
	Total	**38.9**	**28.3**	**10.6**	**72.8**	**27.2**
All	Own Employer Plan	53.9	39.1	14.8	72.5%	27.5%
	Other Employer Plan	16.1	6.8	9.2	42.2	57.1
	None	25.5	10.0	15.5	39.2	60.8
	Total	**95.5**	**55.9**	**39.6**	**58.5**	**41.5**

Source: The Urban Institute's Transfer Income Model (TRIM2), based on the March 1990 Current Population Survey.

Table 5

Effects of a Play or Pay Mandate: Private Sector Workers' Health Insurance Status: 7% Employer-Paid Payroll Tax

			Number of Workers (millions)		Percent:	
Firm Size	Current System	Total	Employer	Public	Employer	Public
Less than 25	Employment-Based:					
	Own Employer	8.5	2.4	6.1	28.2%	71.8%
	Other Employer	6.3	1.1	5.2	17.5	82.5
	None	11.7	1.3	10.4	11.1	88.9
	Total	**26.5**	**4.9**	**21.6**	**18.5**	**81.5**
25-100	Employment-Based:					
	Own Employer	8.3	3.9	4.4	47.0%	53.0%
	Other Employer	2.6	.7	1.9	26.9	73.1
	None	4.3	.9	3.4	20.9	79.1
	Total	**15.2**	**5.5**	**9.7**	**36.2**	**63.8**
100-499	Employment-Based:					
	Own Employer	9.5	4.5	5.0	47.4%	52.6%
	Other Employer	2.1	.6	1.5	28.6	71.4
	None	3.3	.9	2.4	27.3	72.7
	Total	**14.9**	**6.0**	**8.9**	**40.3**	**59.7**
500+	Employment-Based:					
	Own Employer	27.6	17.9	9.7	64.9%	35.1%
	Other Employer	5.1	1.8	3.3	35.3	64.7
	None	6.2	.2	6.0	3.2	96.8
	Total	**38.9**	**22.4**	**16.5**	**57.6**	**42.4**
All	Employment-Based:					
	Own Employer	53.9	28.7	25.2	53.2%	46.8%
	Other Employer	16.1	4.2	11.9	26.1	73.9
	None	25.5	3.3	22.2	12.9	87.1
	Total	**95.5**	**38.8**	**56.7**	**40.6**	**59.4**

Source: The Urban Institute's Transfer Income Model (TRIM2), based on the March 1990 Current Population Survey.

population -- full costs for the poor and partial costs for the near poor. Workers enrolled in the public plan will pay 20 percent of the cost of the plan to the government (unless eligible for subsidies), and their employers will pay a large share of the remaining cost, depending on the payroll tax requirement. At certain tax rates some employers will pay taxes higher than the government's cost of insuring their workers (thereby partially subsidizing costs for the low-income population), because the public plan premium would be less expensive than the premium available to small employers.

Figure 7 compares insurance costs by payor under the play or pay employer mandate with current insurance costs. Under both payroll tax options, employers would pay the majority of insurance costs. They would pay $173.2 billion (64 percent) under the 9 percent plan, and $158.6 billion (59 percent) under the 7 percent plan. Thus, employers' costs would be $14.6 billion lower under the 7 percent play or pay plan than under the 9 percent plan. In contrast, government's costs would be $11.2 billion higher under the 7 percent plan than under the 9 percent plan ($64.4 billion compared to $53.2 billion). Notice that individual's costs (net of premium subsidies) would be slightly higher under the 7 percent payroll tax assumption. This occurs because some workers would lose the advantage of employment-based plans that pay more than 80 percent of the premium. Instead, they would pay 20 percent of the public plan premium.[7] Finally, total insurance costs are somewhat lower in the 7 percent payroll tax scenario compared to the 9 percent scenario -- $269.4 billion compared to $272.2 billion. This occurs because public plan premiums are lower than premiums for firms with fewer than 1,000 workers.[8]

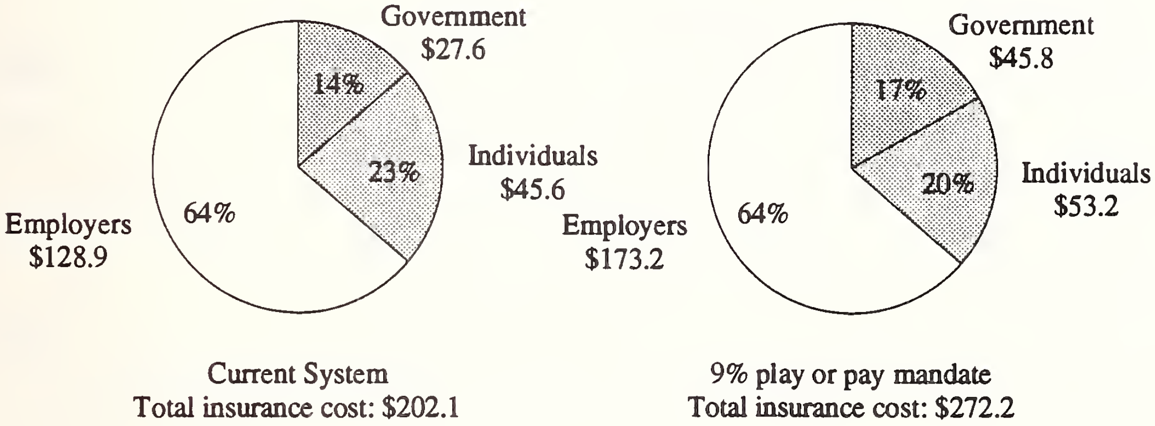
Table 6 presents the components of these costs by sector. As shown, employment-based premiums would cover 51 percent of costs under the 9 percent payroll tax assumption, but only

Figure 7

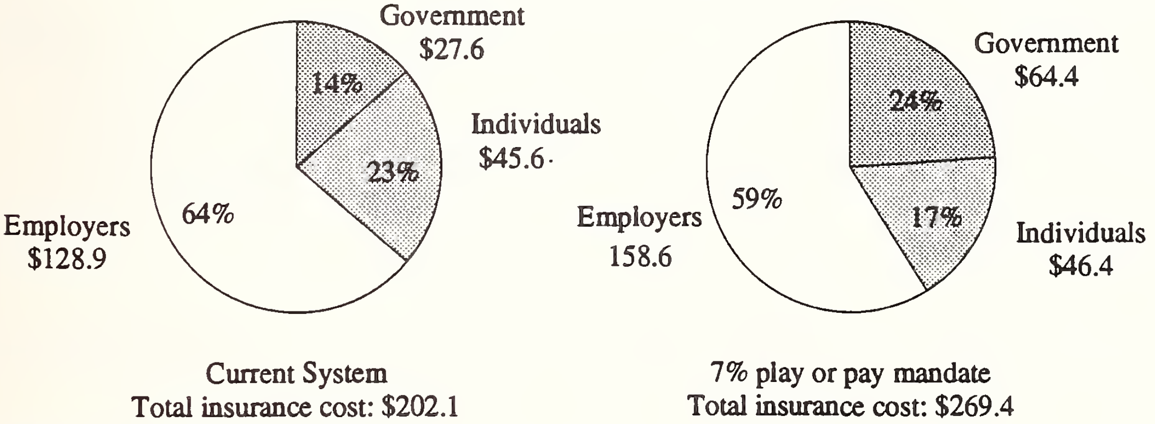
Insurance Costs by Major Payors [1]

Current System Compared to Play or Pay Mandates

(Billions of 1989 Dollars)



9% Payroll tax rate



7% Payroll tax rate

Source: The Urban Institute

[1] Increased insurance costs under play or pay mandate DOES NOT imply increased health care spending. The play or pay system would insure all nonelderly persons and provide subsidies to pay for cost sharing for low-income persons.

Table 6

Effects of Play or Pay Employer Mandates on Direct Spending by Payor

Billions of 1989 Dollars

	Play or Pay Mandate:			
	9% Payroll Tax		7% Payroll Tax	
Payor:	$	Percent of Total	$	Percent of Total
Employers				
Premiums	$ 139.0	51.0%	$ 110.2	40.9%
Payroll Taxes	34.2	12.6	48.4	18.0
Total	$ 173.2	63.6%	$ 158.6	58.9%
Individuals[1]				
Workers' Private Plan Premiums	$ 23.2	8.5%	$ 18.2	6.8%
Workers' Public Plan Premiums	9.3	3.4	14.9	5.5
Nonworkers' Public Plan Premiums	13.3	4.9	13.3	4.9
Total	$ 45.8	16.8%	$ 46.4	17.2%
Government				
Workers' Coverage	$ 16.4	6.0	$ 27.7	10.3%
Premium Subsidies	4.4	1.6	4.3	1.6
Nonworkers' Coverage	23.8	8.7	23.8	8.8
Out-of-Pocket Subsidies	5.9	2.2	5.9	2.2
Cap for Low-Income Families	2.7	1.0	2.7	1.0
Total	$53.2	19.5%	$64.4	23.9%
Total Costs (gross)	**$272.2**	**100.0%**	**$269.4**	**100.0%**

SOURCE: The Urban Institute's Transfer Income Model (TRIM2), based on the March 1990 Current Population Survey.

Notes: 1. Individual premiums are net of subsidies provided by government to low-income persons.

40.9 percent under the 7 percent payroll tax assumption. Employers' tax payments are higher in the 7 percent scenario. Moreover, governments' share for workers' coverage is substantially higher in the 7 percent payroll tax scenario as employers enroll more workers in the public plan and pay a lower share of the cost of insuring them.

It is important to remember that these costs do not represent entirely new health care costs, nor do they represent total health care costs. The data in table 7 compare insurance costs under the play or pay mandates to current insurance costs. Current systems costs include employment-based insurance premiums, private, nongroup insurance premiums, and Medicaid spending for the nonelderly, noninstitutionalized. We also show current uncompensated hospital care charges in the current system (Propac, 1991). We cannot estimate, however, uncompensated care charges for other providers. In addition, costs under the play or pay systems include subsidies for out-of-pocket cost sharing under health care plans for low-income persons, essentially first dollar coverage policies. Many of these persons currently pay for some of these health care costs out-of-pocket, and these expenses cannot be estimated for the current system.

Nevertheless, the costs represent direct payments for insurance by government, employers, and individuals.[9] These estimates show that total insurance costs would increase by $54.7 billion in the 9 percent play or pay mandate and by $52.3 billion in the 7 percent play or pay mandate. Aggregate employer cost increases are much lower under the 7 percent plan ($29.7 billion compared to $44.3 billion). In this plan, the government's share of the costs would be larger. Government's costs, net of current Medicaid spending for the nonelderly, would increase by $36.4 billion in the 7 percent play or pay plan, compared to $25.2 billion in the 9 percent plan. These

Table 7

Insurance Costs by Payor: Current System Compared to Play or Pay
Billions of 1989 Dollars

9 Percent Play or Pay Plan

	Current	Mandate	Difference
Employers	$128.9	$173.2	+ $44.3
Individuals[1]			
Group Premiums	$31.1	$23.2	- $7.9
Other Premiums[2]	14.5	22.6	+ $8.1
Total	$45.6	$45.8	+ $0.2
Government			
Public Coverage[3]	$27.6	$53.2	+ $25.6
Total	$202.1	$272.2	+ $70.1
Uncompensated Hospital Care	(5)	-$15.0	-$15.0
Insurance Costs, net	**$202.1[6]**	**$257.2**	**+$55.1[6]**

7 Percent Play or Pay Plan

	Current	Mandate	Difference
Employers	$128.9	$158.6	+ $29.7
Individuals[1]			
Group Premiums	$31.1	$18.2	- $12.9
Other Premiums[2]	14.5	28.2	+ 13.7
Total	$45.6	$46.4	+ $0.8
Government			
Public Coverage[3]	$27.6	$64.4	+ $36.8
Total	$202.1	$269.4	+ $67.3
Uncompensated Hospital Care	(5)	$-15.0	-$15.0
Total Insurance Costs, net	**$202.1[6]**	**$254.4**	**+$52.3[6]**

SOURCE: The Urban Institute's Transfer Income Model (TRIM2), based on the March 1990 Current Population Survey.

Notes:
1. Individual premiums are net of premium subsidies paid by government.
2. Includes private, nongroup premiums under current system (Holahan and Zedlewski, 1991) and premiums in public plan under mandate.
3. Medicaid costs for nonelderly, noninstitutionalized (Holahan and zedlewski, 1991).
4. Prospective Payment Commission (1991).
5. Uncompensated care under the current system is included in insurance costs of direct payors (employers, individuals, and government).
6. The current insurance system is far less comprehensive than than the pay or play systems. Fewer persons have coverage, and out-of-pocket cost sharing is not covered for low-income persons with health insurance. Thus, many of the additional costs shown under the play or pay options would simply offset out-of-pocket health care spending under the current system.

cost increases compared to 1989 government (federal and state and local) personal health care spending of $214.5 billion.[10]

We expect, however, that current uncompensated care charges would be distributed back to payors under both play or pay systems, decreasing these cost effects for government and employers. In addition, with such a large public health plan the government could potentially negotiate more favorable insurance rates than those assumed in this analysis. On the other hand, the government would pay administrative costs not reflected here to administer annual income tests for persons eligible for premium and out-of-pocket cost sharing subsidies.

Costs by Employer Size. Table 8 shows the change in employers' costs under the 9 and 7 percent play or pay mandates by firm size. As shown, small employers would experience the largest increase in cost. Under the 9 percent payroll tax rate, they would pay $16.8 billion in premiums and $14.4 billion in taxes to insure their workers, compared to $15.5 billion under the current system. These cost increases include coverage of workers who currently do not have insurance, insurance upgrades for some employers who currently provide insurance. In addition, these results are net of cost savings to some employers for whom the payroll taxes or the uniform benefit package is less expensive than current costs.

IV. Summary

This paper provides estimates of some simple, first-round effects of a particular health care reform proposal, a comprehensive play or pay employer mandate with public plan coverage guaranteed to all nonelderly Americans. We show that this type of proposal would provide a

Table 8

Effects of Play or Pay Mandates on Employers Costs

Billions of 1989 Dollars

Play or Pay: 9% Tax Rate

		Employers' Costs:			Change:	
Firm Size	Current	Premiums	Taxes	Total	$	%
Less than 25	$15.5	$16.8	$14.4	+$31.2	+$15.7	+101%
25-99	14.5	16.6	5.6	+22.2	+7.7	+53
100-499	20.8	21.4	5.1	+26.5	+5.7	+27
500-999	9.0	9.5	1.7	+11.2	+2.2	+24
1000+	69.0	74.7	7.4	+82.1	+13.1	+19
Total	**$128.9**	**$139.0**	**$34.2**	**+$173.2**	**+$44.3**	**+34%**

Play or Pay: 7% Tax Rate

		Employers' Costs:			Change:	
Firm Size	Current	Premiums	Taxes	Total	$	%
Less than 25	$15.5	$9.2	$17.3	$26.5	+$11.0	+71%
25-99	14.5	11.3	8.5	19.8	+5.3	+37
100-499	20.8	15.9	8.1	24.0	+3.2	+15
500-999	9.0	7.0	3.2	10.2	+1.0	+11
1000+	69.0	66.9	11.2	78.1	+9.1	+13
Total	**$128.9**	**$110.2**	**$48.4**	**$158.6**	**+29.7**	**+23%**

SOURCE: The Urban Institute's Transfer Income Model (TRIM2), based on the March 1990 Current Population Survey.

Notes:

1. Employers either pay 80% of the cost of covering full-time (18 hours a week or more) workers and their nonworking dependents or a tax appled to payroll.
2. Employers who "play" must provide insurance meeting the requirements of a uniform benefit package or the actuarial equivalent.

hybrid approach to health care reform. Depending on the payroll tax rate chosen, these proposals would result in a relatively large public plan, while still retaining a relatively large role for the private insurance sector.

Some key findings are the following:

- Comprehensive play or pay systems would guarantee all Americans regular access to health care. Nonworking persons currently in Medicaid and low-income uninsured persons would be covered under the public plan. The government would provide subsidies to help pay for the cost sharing requirements of low-income persons, whether they are insured privately or through the public health plan.
- The number of persons with private, employment-based health insurance is likely to decline under play or pay mandates -- from 142.2 million persons currently to 131.8 million persons under a plan that requires employers to either pay a 9 percent payroll tax or provide health insurance and to 104.7 million persons under a 7 percent payroll tax requirement.
- Because small employers' payrolls are much lower than average, and their health insurance costs are higher than average, they would find the payroll tax option more attractive than providing health insurance directly. We predict, for example, that 64 percent of private sector workers in firms with fewer than 25 workers would be enrolled in the public plan under a 9 percent payroll tax option.
- Government's costs would increase by $25.2 billion under a 9 percent payroll tax rate and by $36.4 billion under a 7 percent tax rate. Employers, on the other hand would spend $44 billion more for health insurance under the 9 percent play or play plan, and under the 7 percent plan their costs would increase by about $30 billion. These would offset some of the current costs that individuals pay for insurance premiums, out-of-pocket costs, and uncompensated care charges. In addition, some employers would save money under a play or pay proposal -- when the payroll tax is less expensive than their current health insurance costs and when private insurance costs are lower because working dependents will shift to their own employers' plans.

The increases in employers' health care costs may be difficult for some employers to sustain. It is possible that they would pass some of the cost increases on to workers. Consequently, some workers could experience declines in cash wages in exchange for guaranteed health insurance. Most play or pay proposals would phase-in participation of small employers so

that employers could adjust to increased cost of insuring their workers (Pepper, 1991). Nevertheless, the effect of play or pay proposals on wages needs to be examined carefully.

Further analysis will also be required to examine the full distributional effects of play or pay proposals. It will be important to understand the effects by location, industry, and population subgroup. It will also be important to show sensitivity to design options. As mentioned earlier, the 80 percent cost share required of employers for family coverage is relatively high by today's standards. Some workers could afford to pay a larger share out-of-pocket to cover dependents. This type of option would reduce the proportion of workers enrolled in the public plan, reduce the governments costs, and reduce the reliance on a proportional tax to finance health care. We also need to examine alternative definitions of part-time work. If employers did not have to cover persons working less than 35 hours a week (a traditional definition of full-time work), the effects of play or pay proposals could be substantially different that those shown here. We also need to consider the effects of these proposals over time. As mentioned above, most proposals suggest that small employers be phased into the play or pay system.

All reform proposals imply shifts in how we finance health care. Given the high and rapidly increasing costs of health care, any approach to system reform will be expensive. Different reform approaches vary considerably in choosing who will bear the burden for health care costs. Play or pay proposals place much of the burden on employers and their workers; other approaches would finance health care through the tax system. It is also important to remember that most of the health care reform proposals contain health care cost containment mechanisms. It is the long run success of these mechanisms that will be most important in determining the future burdens of different payers.

Notes

1The March CPS reports firm size, rather than establishment size, for workers. However, employers' play or pay decisions would be made at a lower lower of aggregation. Many firms include units with separate management and legal structures. Consequently, payroll data are available at the establishment level, and sometimes, the enterprise level. Thus, we map a worker's firm size to an establishment category using data from the May 1988 Current Population Survey which provides both variables for workers before matching payroll to the workers.

2Some employers/workers, particularly those with private coverage today, may prefer private coverage to the public plan, even if the cost is a little higher than the public plan. Workers with broader coverage than provided by the uniform benefit package, for example, may prefer to retain that coverage. Future analysis will explore this possibility. However, we expect that employers will make the most financially advantageous decisions in the long run. In addition, workers and employers could purchase wrap-around insurance policies to broaden their coverage. Thus, there would be little incentive to retain private coverage that is more expensive for the same level of coverage.

3Some observers believe that costs to small firms could be reduced the levels faced by large firms. This type of assumption will be considered in the larger version of this paper.

4Note that the model also incorporates price variations by industry and location. Space does not permit full presentation of the premium matrix. See Acs et al (1992) for more details on premium assumptions.

5Most of the legislative proposals suggest a phase-in period for small employers who do not currently provide health insurance so that they can adjust to the new costs.

6The average payroll figures shown in figure 5 reflect average pay from the CBP data matched to workers on the CPS reweighted to reflect pay for full-time workers by CPS firm size categories.

7

Workers in employer plans that provide benefits better than the uniform benefit plan retain that coverage as long as the employer chooses to retain a private plan. For example, some employers currently pay more than 80 percent of the cost of insurance for their employees.

8As shown earlier, we assume that the government purchases insurance at the same price currently paid by large firms (more than 1,000 workers) in a given location, and large firms face the lowest prices for the the mandated benefit package.

9 We do not show employers' cost net of taxes because we reflect payments to insurers. In addition, the full effects of financing the tax deductions for employers is beyond the scope of this project. Under play or pay systems employers' costs (whether premiums or payroll taxes) would be deductible as business expenses. Thus, the government would finance part of the costs

shown.

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